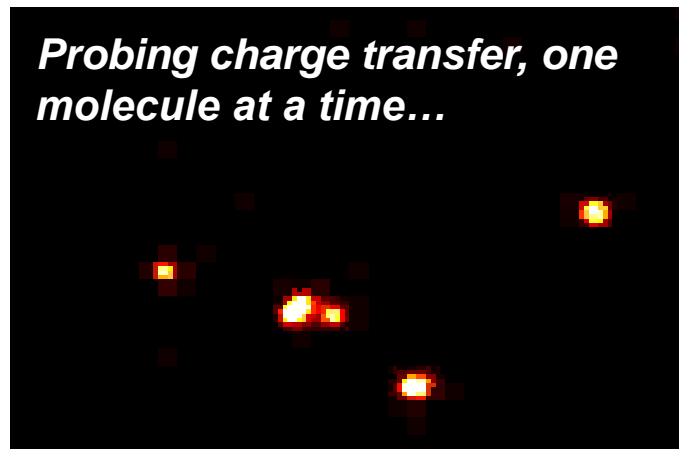




This EFRC will elucidate how the useful properties of materials for solar cells and batteries can be dramatically improved by controlling their molecular shape and arrangement.

Probing charge transfer, one molecule at a time...



Each light burst is a single molecule in a model solar cell.

RESEARCH PLAN AND DIRECTIONS

We will use newly developed sub-ensemble techniques (including single-molecule spectroscopy and imaging) coupled with theoretical methods to answer key outstanding questions on charge separation and transfer for solar cell and battery materials.

Expected outcomes: new R&D tools, new high-performance materials and the education of a new generation of energy researchers